MULTI-CHANNEL AUDIO SURROUND SOUND FROM FRONT LOCATED LOUDSPEAKERS

ABSTRACT OF THE DISCLOSURE

A surround sound reproduction system uses a series of filters and a system of main and sub-speakers to produce phantom rear surround sound channels or a phantom surround sound effect from a loudspeaker system or pair of loudspeaker systems located in front of the listener. The sound system includes left and right surround input signals, and left and right front input signals. Left and right sub-speakers, and left and right main speakers are located in front of a listening location. Spacing between respective main and sub-speakers is approximately equal to ear spacing for an average person. The input to the left sub-speaker comprises the right surround signal subtracted from the left surround signal each signal having previously passed through a front-to-back filter and a series of high and low pass filters. The input into the left main speaker comprises the left front signal added to the left surround signal after the left surround signal has passed through a front-to-back filter. The input into the right sub-speaker comprises the left surround signal subtracted from the right surround signal each signal having previously passed through a front-to-back filter and a series of high and low pass filters. The input into the right main speaker comprises the right front signal added to the right surround signal after the right surround signal has passed through a front-to-back filter.

::ODMA\MHODMA\SKGF_DC1;168807;1